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TAPING MACHINE

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ABSTRACT OF THE DISCLOSURE

An elongated reservoir for flowable material having a pair of parallel arms pivotally mounted thereon and projecting longitudinally beyond one end thereof. The inner and outer portions of said arms mount rollers with the inner roller selectively sealing an aperture in the front of the reservoir and with the outer roller normally being a roll of tape. The tape passes from the outer roller about the inner roller at which point the flowable material is picked up on the tape with the tape returning to the outer roller and being pressured thereby into mounting engagement against a surface. The device includes both tape severing and tape guiding means as well as means for selectively pressurizing the fluid within the reservoir.

This invention relates to the wallboard industry and more particularly to a machine for taping the seams of wallboard, which machine is adapted to supply the tape to be cemented to the joints of the wallboard, supply the cement, sever the tape, and apply the tape to the wallboard.

Mechanical taping tools, which are qualified for production work in wallboard taping, are known in the art. However, the taping machines which are known are rather expensive in manufacture and for the most part must be rented by the person using the machine. The rent on these machines is substantial, and a shop doing wallboard work can as a rule afford one of these rented tools only if they can keep the machine in operation over a substantial period of time.

Small and medium size paint contractors find that wallboard preparation is a relatively small part of their business. However, such wallboard preparation is a very important part of the painting business and in many instances contracts are not given out unless the painter is willing to contract for the wallboard work. The larger painting contractors are able to keep rented taping machines in operation since they have numerous jobs on which the taping tools may be used. As a result of this, larger painting contractors are able to under-bid the smaller competitors, and in some instances may even cut the cost of drywall preparation in half. The smaller painting contractors find it uneconomical to maintain one of these rented tools for occasional wallboard jobs, since the rent they would have to pay would more than deplete any profit that may be gained from having one since the rent must be paid during periods when the machine is idle, and as a rule the period over which such a machine is used by a small painting contractor is relatively small. Furthermore, maintenance of these rented machines is a major item. In many instances two machines must be kept on hand in order to keep one working since the machines are subject to break-down. Although the maintenance cost is assumed by the company that rents the machines this presents many problems when the contractor is operating away from the major cities where the tool service centers are located.

The wallboard taping machines that are known today also have a problem in the cleaning thereof. These machines are so enclosed that a thorough clean-up is practically impossible, and very time consuming.

In many wallboard taping machines known today the machine must be filled by means of a pump. In the process of filling this machine occasionally the pump will discharge a void, or air pocket into the reservoir of the tool, and as a result dry tape will ensue during the taping operation. This will impair the quality of the surface preparation.

Another disadvantage of present-day taping machines is the lack of manual control of the quantity of adhesive administered to the tape during its taping operation. All surfaces do not require the same amount of adhesive. As for example a raised or flat surface does not require the same amount of adhesive as a recessed surface would.

Accordingly, a primary object of this invention is to provide a taping machine for wallboard which is simple in design, and construction and is inexpensive and feasible to manufacture so that it will be relatively inexpensive to all painting contractors. Also, this machine will use parts which can be supplied or duplicated by any hardware store should this be necessary when the machine is being operated in a non-urban area. The taping machine of this invention is durable and rigid in construction, capable of withstanding rough treatment and not subject to frequent break-downs.

Another object of the present invention is to provide a taping machine wherein a complete and thorough clean-up can be accomplished in a matter of minutes, in such a manner that the machine may be stored away for future use.

A still further object of this invention is to provide a taping machine which can be filled with taping cement without the use of extraneous equipment, and which may be filled from the top thereof thereby making it improbable that air voids will be left in the reservoir containing the taping cement.

A further object of the present invention is to provide a taping means wherein the operator of the machine will at all times have control of the adhesive dispersement. In constructing this taping machine compression is designed to be applied against the taping adhesive or cement retained within the reservoir of the machine to force the taping cement toward the front of the reservoir, wherein an orifice is provided to allow the taping cement to emit from the reservoir. Compression means are provided on the reservoir for maintaining a light pressure on the taping cement, however, the controlling pressure of the machine will be exerted by the operator of the machine during the operation.

A still further object of the present invention is to provide a taping machine for laying the tape material, which machine has an integral creasing tool with a floating action that allows the creasing tool to operate although the machines parallel angle with the surface to be taped may fluctuate, and which machine has a floating guide tool that maintains the position of the tape being laid in full relationship to the pressing force on the machine.

Another object of the present invention is to provide a taping machine wherein the tape cutting knife used to sever the tape automatically retracts into a self-locking position when the machine is lifted from the tape surface.

A still further object of the present invention is to provide a taping machine wherein the application of an adhesive to any strip type of rollable material is manually controlled; and wherein such materials may be laid on all vertical or horizontal surfaces for the purpose of covering and binding cracks, crevices, abrasions or for marking or decorative purposes.

Another object of the present invention is to provide a reservoir having a compressor assembly spring tensioned to force the rearward end of the compressor assembly down into the reservoir ahead of the forward end to there-